Description

Eliminate non-stormwater discharges to the stormwater collection system. Examples of non-stormwater discharges are process wastewaters, cooling waters, wash waters, and sanitary wastewater.

Approach

The following approaches may help you identify non-stormwater discharges:

- Visual Inspection: The easiest method is to inspect each discharge point during dry weather. Drainage from a storm event can continue for three days or more and groundwater may infiltrate the underground stormwater collection system.
- Piping Schematic Review: A review of the "as-built" piping schematic is a way to determine if there are any connections to the stormwater collection system. The piping schematic is a map of pipes and drainage systems used to carry wastewater, cooling water, sanitary wastes, etc.
- Smoke Testing: Smoke testing of wastewater and stormwater collection systems is used to detect connections between the two systems. During dry weather, the stormwater collection system is filled with smoke and then traced to sources. The appearance of smoke at the base of a toilet indicates that there may be a connection between the sanitary and the stormwater systems.
- Dye Testing: A dye test can be performed by releasing a dye into either your sanitary or process wastewater system and examining the discharge points from the stormwater collection system for the dye color.
- Video Inspection: Mobile video cameras can be guided remotely through storm sewer lines to observe possible illicit connections into storm sewer systems and record observations on a videocassette or DVD. Public works staff can observe the videos and note any visible illegal connections.

Limitations

- Many facilities do not have accurate, up-to-date schematic drawings.
- TV and visual inspections can identify illicit connections to the storm sewer, but further testing is sometimes required (e.g. dye, smoke) to identify sources.

Additional Information

An illicit connection is any physical connection to a publicly maintained storm drain system composed of non-stormwater that has not been permitted by the public entity responsible for the operation and maintenance of the system. Facilities subject to EPA stormwater permit requirements should include a certification that the stormwater collection system has been tested or evaluated for the presence of non-stormwater discharges.

Non-stormwater discharges to the stormwater collection system may include any water used directly in the manufacturing process (process wastewater), air conditioning coolant, outdoor secondary containment water, vehicle and equipment wash water, sink and drinking fountain wastewater, sanitary wastes, or other wastewaters. See Appendix A, Disposal Alternatives table, for more

information.

To ensure that the stormwater system discharge contains only stormwater, you should:

- Locate and evaluate all discharges to the industrial storm sewer system (including wet weather flow) using one of the following:
 - ✓ "As built" pipeline schematics
 - ✓ Visual observation
 - ✓ Dye tests
 - ✓ TV camera
 - ✓ Chemical field test kits
 - ✓ Smoke tests
- Develop a plan to eliminate illicit connections:
 - ✓ Identify appropriate connection or disposal alternatives
 - ✓ Replumb sewer lines
 - ✓ Isolate problem areas
 - ✓ Plug illicit discharge points
- Document that non-stormwater discharges have been eliminated by recording tests performed, methods used, dates of testing, and any on-site drainage points observed.
- Provide well-marked proper disposal or collection sites for wastewater.
- Employee training should especially emphasize proper disposal of nonstormwater.
- Label all storm drains and catch basins with "Dump No Waste" stenciling so employees and customers know which inlets are part of the storm drain system.
- Periodically inspect and maintain storm drain inlets. Clean out catch basins so that accumulated pollutants do not wash down the storm drains.